State of California AIR RESOURCES BOARD

Final Statement of Reasons for Rulemaking Including Summary of Comments and Agency Responses

PUBLIC HEARING TO CONSIDER THE TRIENNIAL REVIEW OF ASSESSMENT AND MITIGATION OF IMPACTS OF TRANSPORTED POLLUTANTS ON OZONE CONCENTRATIONS IN CALIFORNIA AND TO CONSIDER AMENDMENTS TO THE TRANSPORT IDENTIFICATION AND MITIGATION REGULATIONS

Public Hearing Date: November 21, 1996

Agenda Item No.: 96-9-3

I. GENERAL

The Staff Report: Initial Statement of Reasons for Rulemaking ("staff report"), entitled "SECOND TRIENNIAL REVIEW OF THE ASSESSMENT OF THE IMPACTS OF TRANSPORTED POLLUTANTS ON OZONE CONCENTRATIONS IN CALIFORNIA (Revised)", released November 1996, is incorporated by reference herein. Copies of the Staff Report may be obtained from the Board's Public Information Office, 2020 L Street, Sacramento, California 95814, (916) 322-2990.

Following a public hearing on November 21, 1996, the Air Resources Board (the "Board"), by Resolution 96-56, approved amendments to the transport identification and mitigation regulations. The regulations amended are contained in sections 70500 and 70600, Title 17, California Code of Regulations. The amendments and additions to the regulations that were adopted by the Board are identical to those initially proposed by the staff and made available in the Staff Report.

The Board has determined that the transport assessments and transport couple redefinitions will not create costs or savings (as defined in Government Code section 11346.5(a)(6)) to any State agency or in federal funding to the State, costs or mandate to any local agency or school district whether or not reimbursable by the State pursuant to Title 2, Division 4, Part 7, Chapter 1 (commencing with section 17500) of the Government Code, or result in other nondiscretionary costs or savings to local agencies. The transport assessments and transport couple redefinitions do not directly contain requirements for action.

The Board considered whether the expanded area of overwhelming transport impact from the Broader Sacramento Area to the central portion of the Mountain Counties Air Basin may create costs to, and impose a mandate upon, the Broader Sacramento Area, as the upwind area. The districts in the Broader Sacramento Area may need to adopt additional control measures to mitigate the impact of their emissions on downwind areas. However, the Board does not believe

the districts will need to adopt more measures than they have already scheduled for adoption in the 1994 Sacramento Area Regional Ozone Attainment Plan because the Broader Sacramento Area is already responsible for the downwind area attainment and the districts have scheduled control measures accordingly. Such control measures will be proposed as part of district air quality attainment plans for ozone under the California Clean Air Act, and will be adopted by the districts pursuant to their normal regulatory adoption procedures. (See Health and Safety Code sections 40725-40728.5)

The San Joaquin Valley Air Basin (SJVAB) is already under Best Available Retrofit Control Technology requirements pursuant to existing transport mitigation regulations because they were already identified as an upwind area. Therefore, no additional measures will need to be adopted relative to the SJVAB impact on the North Central Coast Air Basin and, therefore, no additional costs will be incurred.

Even if the amendments will impose a mandate upon, and create costs to, the air districts responsible for transport, reimbursements from the State to the districts are not required pursuant to Government Code sections 17500 et. Seq. And section 6 or Article XIIIB of the California Constitution because the districts have the authority to levy fees sufficient to pay for the mandated program upon permitted stationary sources which emit the pollutants. (See Health and Safety Code section 42311).

The Board has determined that the proposed regulatory action will not affect small businesses because the mitigation requirements have not changed. Moreover, it is unlikely that either of the transport originators (i.e. Broader Sacramento and San Joaquin Valley) will need to adopt any mitigation measures (i.e. control requirements) beyond those already required and committed to by them as upwind districts in existing transport couples.

The Board also has determined, in accordance with Government Code section 11346.5(a)(8), that adoption of the amendments will not have a significant adverse economic impact on businesses in other states. Finally, the Board has determined that there will be no potential cost impact, as defined in Government Code section 11346.5(a)(9), on private persons or businesses directly affected as a result of adopting the amendments.

In accordance with Government Code section 11346.3, the Board has assessed the potential for adverse economic impacts on California business enterprises and individuals and has determined that adoption of the amendments will not affect the creation or elimination of jobs within the State of California, the creation of new businesses or the elimination of existing businesses within California, or the expansion of businesses currently doing business within California.

The Board has further determined that no alternative considered by the agency would be more effective in carrying out the purpose of the amendments or would be as effective and less burdensome to affected private persons.

II. SUMMARY OF PUBLIC COMMENTS AND AGENCY RESPONSES

The staff received comments on the proposed amendments at a public consultation workshop held on July 10, 1996, to discuss its transport assessment studies with districts and other interested parties. These comments and the staff's responses to those comments were included in Chapter I of the Staff Report.

During the 45-day comment period after the release of the Staff Report, the staff received written comments from Ms. Ellen Garvey of the Bay Area Air Quality Management District (Bay Area AQMD), and Mr. David L. Crow of the San Joaquin Valley Unified Air Pollution Control District (San Joaquin Valley UAPCD). At the November 1996 hearing, the Board heard oral comments from Mr. Eldon Heaston of the Mojave Desert Air Quality Management District (Mojave Desert AQMD), and Mr. Gene Kulesza of Riverside Cement Company (Kulesza). A summary of each of the comments and the agency's response is given below.

A. General Comments on Assessments

1. <u>Comment</u>: In 1990, the ARB found that the Bay Area's transport to the San Joaquin Valley was "significant" on some days and "inconsequential" on others. In the 1993 Triennial Review the ARB concluded that an exceedance at Crows Landing on August 6, 1990 was caused by overwhelming transport from the Bay Area. This became the basis of the current classification. Subsequently we learned that, under ARB's definition, the August 6, 1990 exceedance was an "extreme concentration event." The ARB's practice is to exclude extreme concentration events from transport analysis. Also, subsequent photochemical simulations of August 6, 1990 indicated significant, rather than overwhelming, transport impacts on the northern San Joaquin Valley. Thus, based on what we now know, the finding of overwhelming impacts in the 1993 Triennial Review was inconsistent with current transport-assessment methodology and modeling results. (Bay Area AQMD)

Agency Response: The staff relied on the following information in recommending that the overwhelming transport classification for this couple be continued: 1) Although the previous classification was based on an August 6, 1990 exceedance at Crows Landing, there is evidence of overwhelming transport into other areas of the northern San Joaquin Valley on that day. Air Quality modeling for that day with all anthropogenic emissions removed from the San Joaquin Valley clearly demonstrates overwhelming transport into a large portion of the northern Valley; and 2) Staff's analysis of exceedances at Crows Landing and Tracy in 1994-1995 found two exceedance days in 1995 that were due to overwhelming transport: August 1, 1995 and August 9, 1995.

2. <u>Comment</u>: We believe that some of the transport-assessment approaches used by the ARB fail to take into consideration some important characteristics of ozone episodes and

thereby can lead to invalid conclusions. Because the atmospheric dynamics associated with the ozone episodes are complex and incompletely known, we need an underlying *conceptual model* that helps guide our thinking as we attempt to develop approaches to assess transport and to interpret results. (Bay Area AQMD)

Agency Response: The model used in the ARB's analyses is the San Joaquin Valley Air Quality Study/Atmospheric Utility Signatures, Predictions, and Experiments (SJVAQS/AUSPEX) Regional Model Adaptation Project (SARMAP) model. The ARB believes the SARMAP is far beyond a *conceptual model* and is in fact the most sophisticated meteorological and air quality model available. The results from the SARMAP analyses provide the most thorough, scientific transport assessment possible for the study of this transport couple.

3. <u>Comment</u>: While we recognize that there are times when emissions from the Bay Area affect ozone levels in the northern San Joaquin Valley, we do not think that the analyses to date have demonstrated instances of "overwhelming" impacts. Despite our disagreement on this point, we believe that the cooperative efforts of our staff analysts have produced better analyses, have advanced our understanding of transport phenomena, and have greatly improved communication between agencies. We look forward to continuing this partnership as we work toward a better understanding of this important and complex issue. (Bay Area AQMD)

Agency Response: Even with the use of the best models there are some uncertainties in any analyses. The knowledge and skills are improving all the time. The uncertainties, however, should not be used to invalidate or void the findings presented in the report. The working partnerships should continue.

4. <u>Comment</u>: The District is concerned about the Bay Area AQMD letter challenging the Board's finding of "overwhelming" transport from the Bay Area AQMD to the San Joaquin Valley UAPCD and requesting that the transport designation be changed to "significant". (San Joaquin Valley UAPCD)

<u>Agency Response</u>: We agree, and did not change the "overwhelming" finding. See the agency response to comment number 2, above.

5. <u>Comment</u>: The District maintains that the Bay Area AQMD should be pursuing a change in State law which will allow it to institute an Enhanced Vehicle Inspection and Maintenance program. The emissions reductions realized by such a program will benefit the air quality in the Bay Area, as well as that of the San Joaquin Valley and other downwind air basins. (San Joaquin Valley UAPCD)

Agency Response: This is beyond the scope of this triennial review and is being discussed by interested parties in other forums..

6. <u>Comment</u>: The District looks forward to working with all parties involved in this

issue to achieve improved air quality. (San Joaquin Valley UAPCD)

Agency Response: The working partnerships should continue to increase understanding of the complex transport relationships. As the knowledge of transport increases, the uncertainties about the transport processes will decrease.

7. <u>Comment</u>: We thank the Board for allowing us to participate in the transport committee working groups. It was really worthwhile. We urge support for the adoption of the staff recommendation. (Mojave Desert AQMD)

Agency Response: Thank you. Supervisor Riordan also mentioned that the committee process was very positive.

8. <u>Comment:</u> The Desert transport committee is a very diverse and talented group. We have major participation from industry and the military. We are looking for scientific accuracy. We want to identify further the local generation of pollutants and what contribution transport really makes. We commend the staff for its recommendation and urge the Board to support it. (Kulesza)

Agency response: Thank you. The staff agrees the committee played a very active and influential roll in the analyses and preparation for the staff report. The support of the committee was very important to the staff in preparation of the staff report.